PATENT COOPERATION TREATY, REC'D 25 APR 2005 From the INTERNATIONAL SEARCHING AUTHORITY WIPO To: WRITTEN OPINION OF THE see form PCT/ISA/220. INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below International filing date (day/month/year) International application No. Priority date (day/month/year) 22.01.2004 21.01.2005 PCT/GB2005/000224 International Patent Classification (IPC) or both national classification and IPC C23C24/08, C23C26/00, C23C30/00 **Applicant** THE VICTORIA UNIVERSITY OF MANCHESTER This opinion contains indications relating to the following items: 1. ☑ Box No. I Basis of the opinion **Priority** ☐ Box No. II Non-establishment of opinion with regard to novelty, inventive step and industrial applicability ☐ Box No. III. ☐ Box No. IV Lack of unity of invention Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the International application Box No. VIII Certain observations on the international application FURTHER ACTION If a demand for International preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bls(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

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3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:

Authorized Officer



European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswljk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016

Elsen, D

Telephone No. +31 70 340-2005



# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/GB2005/000224

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	Box N	o. I Basis of the opinion			
1.		With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.			
	. la	nis opinion has been established on the basis of a translation from the original language into the following nguage , which is the language of a translation furnished for the purposes of international search nder Rules 12.3 and 23.1(b)).			
2.	egard to any nucleotide and/or amino acid sequence disclosed in the international application and sary to the claimed invention, this opinion has been established on the basis of:				
	, a. type	of material:			
		a sequence listing			
		table(s) related to the sequence listing			
	b. form	nat of material:			
		in written format			
	. 🗆	in computer readable form			
	c. time	of filing/furnishing:			
		contained in the international application as filed.			
		filed together with the international application in computer readable form.			
		furnished subsequently to this Authority for the purposes of search.			
3.	ha co	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto as been filed or furnished, the required statements that the information in the subsequent or additional pies is identical to that in the application as filed or does not go beyond the application as filed, as propriate, were furnished.			
4.	Additional comments:				

Box No. V Reasoned statement under Rule 43bls.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

No:

No:

Claims

1-33

Inventive step (IS)

Yes: Claims

Claims

1-33

Industrial applicability (IA)

Yes: Claims No: Claims 1-33

2. Citations and explanations

see separate sheet

&;

### Re Item V.

- 1 Reference is made to the following documents:
  - D1: DE 198 00 310 A1 (BAYER AG, 51373 LEVERKUSEN, DE) 8 July 1999 (1999-07-08)
  - D2: US 2002/045010 A1 (ROHRBAUGH ROBERT HENRY ET AL) 18 April 2002 (2002-04-18)
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  - D6: DATABASE WPI, Section Ch, Week 200346, Derwent Publications Ltd., London, GB; Class D15, AN 2003-483253, XP002324165 CN 1 405 122 A (ZHANG Y) 26 March 2003 (2003-03-26)
  - D7: US 2003/077398 A1 (STRUTT PETER R ET AL) 24 April 2003 (2003-04-24)
  - D8: WO 02/086194 A (ITN-NANOVATION GMBH; NONNINGER, RALPH; BINKLE, OLAF) 31 October 2002 (2002-10-31)
  - D9: WO 03/025258 A (TECHNISCHE UNIVERSITAET ILMENAU; KERN, HEINRICH; KRUEGER, HORST, GUENT) 27 March 2003 (2003-03-27)
- 2 INDEPENDENT CLAIMS 1,11,27,28
- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1,11,27,28 is not new in the sense of Article 33(2) PCT.

Documents D1-D7,D9 disclose green ceramic coating compositions comprising nanosized particles dispersed within a carrier medium together with pre-formed
particles and a method for producing a ceramic coating upon a substrate
comprising the steps of forming a slurry comprising a mixture of nano-sized
ceramic particles and pre-formed particles, applying the mixture to a substrate and
heat treating the slurry mixture to produce a ceramic coating ( see references of
cited documents in the search report).

## 3 INDEPENDENT CLAIM 32

- 3.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 32 is not new in the sense of Article 33(2) PCT.

  Document D8 discloses (the references in parentheses applying to this document): a method for producing a porous ceramic layer on a substrate and filling the pores in said ceramic porous layer with a metallic layer by electrochemical plating or electroless deposition ( see claims 1-3).
- DEPENDENT CLAIMS 2-10, 12-26, 29-31, 33

  Dependent claims 2-10, 12-26, 29-31, 33 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT). The reasons being as follows: the subject-matter of these claims is known from D1-D9.

PATENT COOPERATION TREATY REC'D 25 APR 2005 From the INTERNATIONAL SEARCHING AUTHORITY WIPO To: WRITTEN OPINION OF THE see form PCT/ISA/220 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below International filing date (day/month/year) International application No. Priority date (day/month/year) 22.01.2004 PCT/GB2005/000224 21.01.2005 International Patent Classification (IPC) or both national classification and IPC C23C24/08, C23C26/00, C23C30/00 **Applicant** THE VICTORIA UNIVERSITY OF MANCHESTER This opinion contains indications relating to the following items: ☑ Box No. 1 Basis of the opinion Box No. II **Priority** Non-establishment of opinion with regard to novelty, inventive step and industrial applicability ☐ Box No. III Lack of unity of invention Box No. IV Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the International application Box No. VIII Certain observations on the international application **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three

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whichever expires later.

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Elsen, D

months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date,

Telephone No. +31 70 340-2005



# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

international application No. PCT/GB2005/000224

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1. Statement

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Yes: Claims

No: Claims

No:

1-33

Inventive step (IS)

Yes: Claims

Claims

Industrial applicability (IA)

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1-33

1-33

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## 3 INDEPENDENT CLAIM 32

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